

Figure 1

ADA	Application Development Architecture
ETA	Enterprise Technology Architecture
HIPPA	Health Insurance Patient Privacy Act
FDA	Food and Drug Administration
B2B	Business-to-Business
B2C	Business-to-Consumer
CMS	Content Management System
PIN	Personal Identification Number (works like a password)
DRS	Device Registration System (Oracle® instance)
JSP	Java Server Page
LDAP	Lightweight Directory Access Protocol (via Oblix® policy server)
SSL	Secure Socket Layer (Browser data communications encryption)
VPN	Virtual Private Network (IP-Secure implementation, B2B data encryption)
XML	eXtensible Markup Language (for machine readable documents and B2B communications)
TSS	Therapy Support Services, or TSS for short
SAIT	Server Administrator Information Technology
SRS	System Requirements Specification
DD	Design Detail Document
SVP	System/Software Validation Plan
VT	Short for Verification Test checklist
SVR	System/Software Validation Report

Figure 2



MEDTRONIC THERAPY SUPPORT SERVICES

Welcome! Please fill out the following form to register. Fields marked with a * are required.

*User ID	holiday1		
*Password	password		
*Confirm			
Your password must be at least 7 characters in length, and must contain at least 2 numeric characters			
Salutation	None	Street Address	9875 Birch Blvd
*First Name	Doc	City	St. Paul
Preferred Name		*State	MN
Middle Name		Zip	55122
*Last Name	Holiday	Phone Number	612-453-1234
Name Suffix	MD	Fax	
*E-Mail Address	holiday@ospain.com	<input type="radio"/> Yes <input type="radio"/> No	
<input type="radio"/> Are you a Physician?		<input type="radio"/> Yes <input type="radio"/> No	
<input type="radio"/> Do you want to receive informational e-mails?		<input type="radio"/> Yes <input type="radio"/> No	
Connection Type	DSL or Cable Modem	Location	Clinic
Computer Type	Windows-based PC	Number of Computers	2

I understand that my User ID and password are for my use only and I agree that I will not share my login information with anyone, nor login using another's User ID.

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Figure 3

* Contact Medtronic

[Email Us!](#)

Please fill out the form below to receive more information about the Therapy Support Services

Fields marked with * are required

5

* First Name	
* Last Name	
* E-Mail Address	
Street Address	
City	
* State	
Zip	
* Phone Number	
Fax	
* Message	

10

Issue [Forgot your Username/Password](#)

Fields marked with * are required

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FIG 4



Please fill out the following form to complete registration. Fields marked with a * are required.

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*Social Security No	399-99-9999	*Home Phone	612-459-7362
*UPIN	U92138413	*Office Phone	612-459-2721
*DEA Number		*Hospital Phone	612-459-2720
*DEA Expiration		Pager	
*State License No		Cellphone	
*State License Expiration			
*Profession	Physician		
Specialty	Neuro Surgery		

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FIG 5

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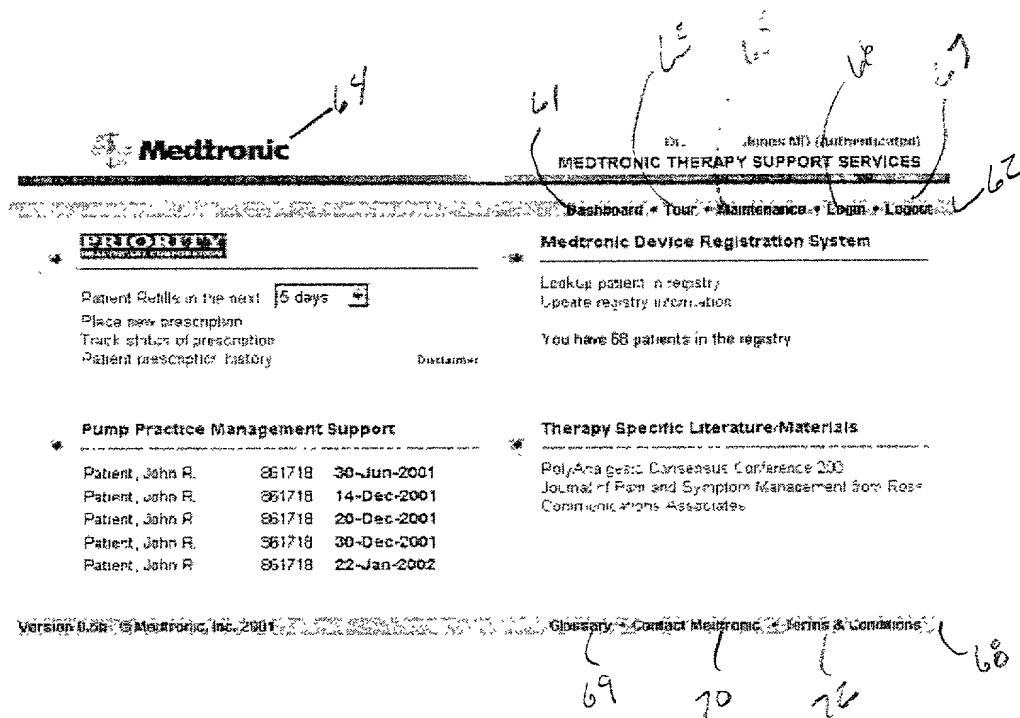


FIG 6

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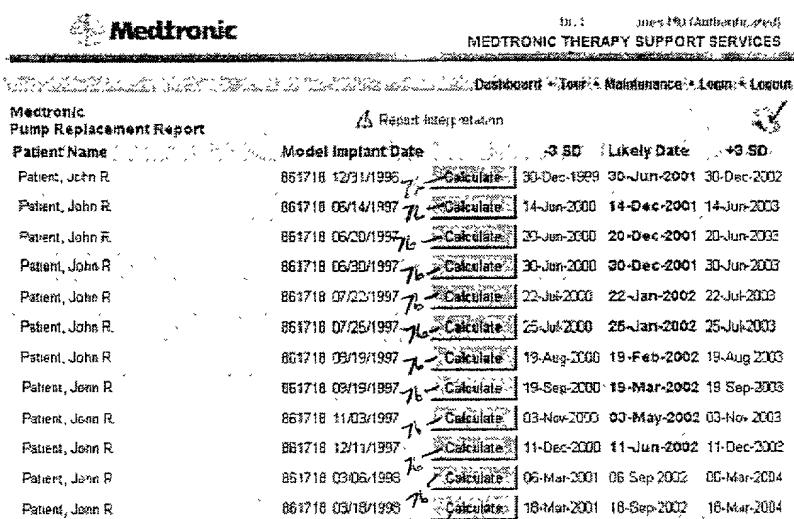


FIG 7

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F16 8



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MEDETRONIC THERAPY SUPPORT SERVICES™



Patient: Pain, Ima N.

Pump Model: 861718

Implant Date: 08/05/1998

Avg. Daily Infusion Volume: mL

-3 SD: 05-Nov-2001

Mean Date: 05-Mar-2002 [43.6 Months]

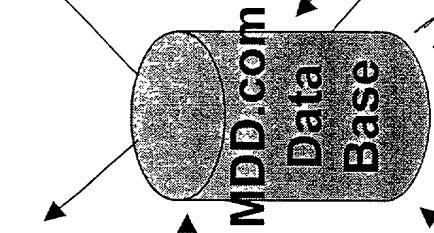
+3 SD: 05-Mar-2002

Important: This calculation assumes constant daily infusion volume over the life of the pump. To improve your calculation, enter your best estimate of the programmed average daily infusion volume since implant.

Reimbursement & Payors

•Outcomes data

- Patient & Practice Mgt Services
 - Algorithms
 - Best Practices
 - Practice Profitability
 - Referral Physicians
 - Local Follow Up
 - Physicians
 - Education



Prescription Chg

Information

Problems?

Device & Physiologic Data

Response

E Visits & Consults

Patient Companion

- Patient Control (bolus & titration)
- Patient Education
- Chronic Disease Mgt System

Patient Control

- Bolus
- Titration
- Monitoring**
 - Device
 - Patient Activity
 - Heart Rate/Rhythm
 - Respiration/Temperature
 - Patient Feedback

Complications

Prescription and Compounding Services



Fig 9

Create or Modify a Digital Dashboard

Grey = Business Rules
Red = Manual Process

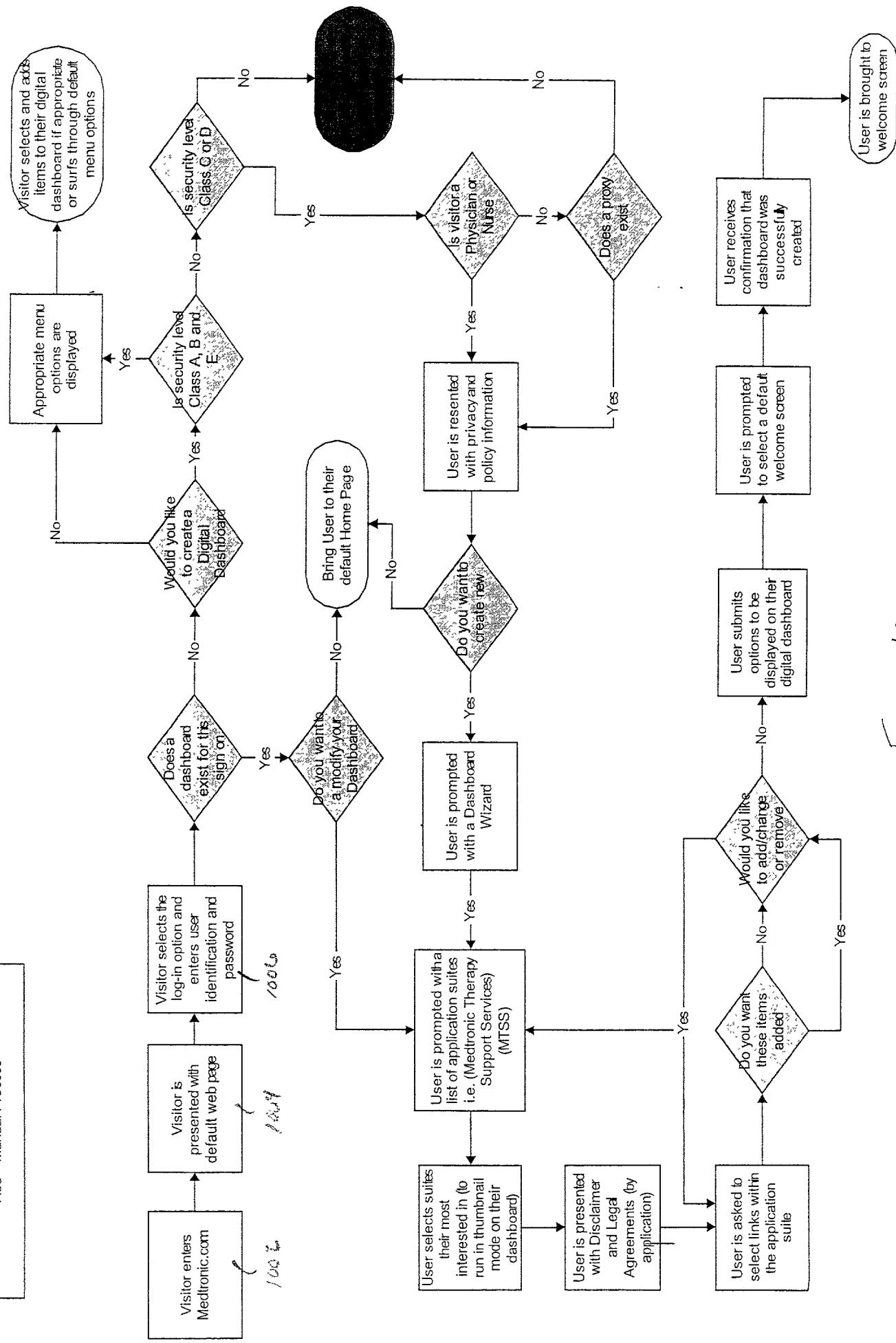
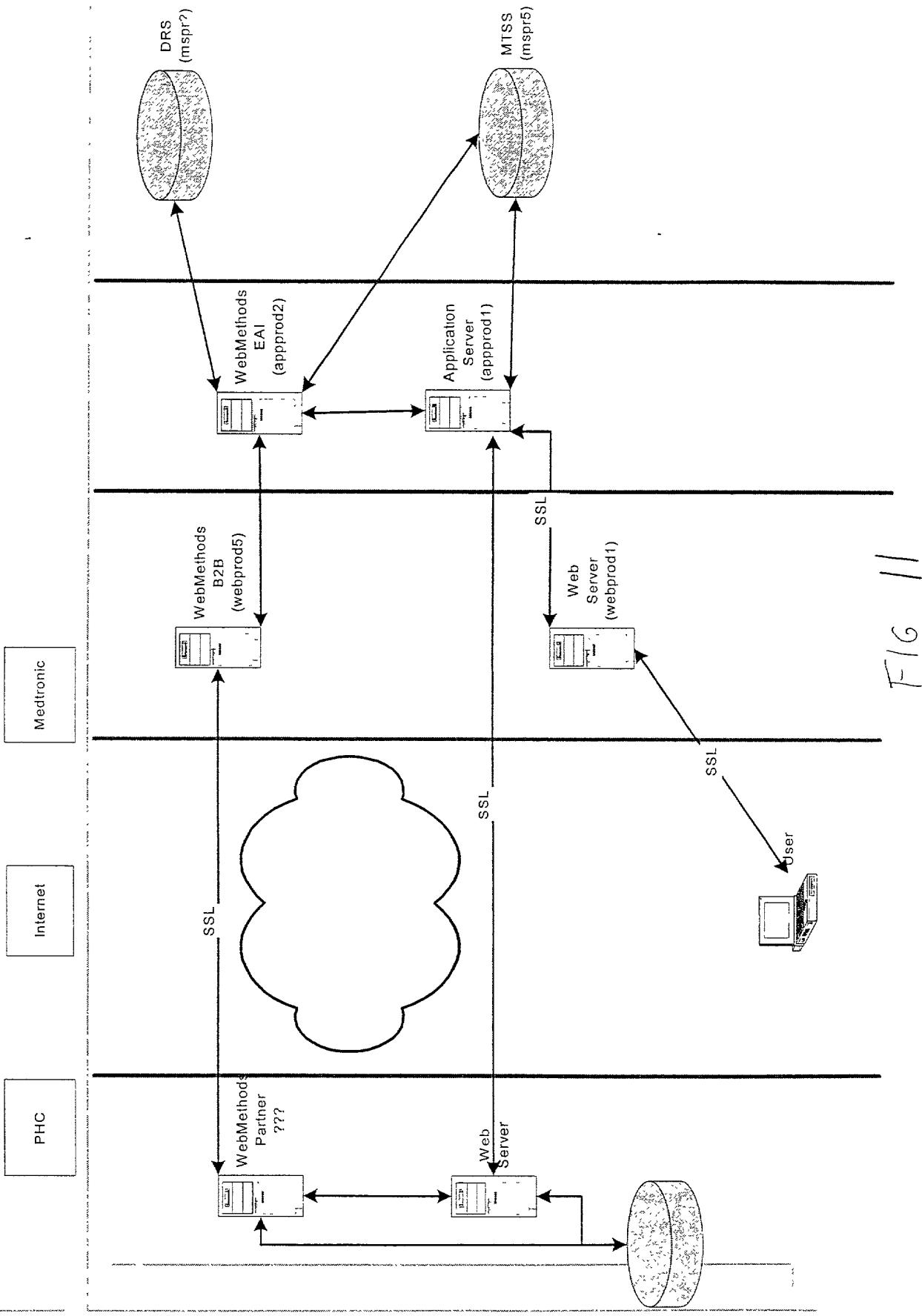


FIG 10

B2B-WebMethods Infrastructure



F16 //

Dashboard Example: TSS



Guy Scott Bristol (authenticated)
THERAPY SUPPORT SERVICES

Logout • Dashboard • Tour • Maintenance • Login • Logout

Medtronic Device Registration System

Patient Refills in the next 5 days

Place new prescription

Track status of prescription

Patient prescription history

Disclaimer

Lookup patient in registry

Register a new implant

Update registry information

You have 6 patients in the registry.

Pump Practice Management Support

Gree, D	8626L10	01-Mar-2004

Therapy Specific Literature/Materials

Scientific American Medicine
Medical Journals
Clinical Pharmacology
Expert Interviews

Patient Reminder status



Patient Reminders in the next

Place new prescription

Track status of prescription

Patient prescription history

Read This!

FIG 13

Application Example 1



Guy Bristol (authenticated)
THERAPY SUPPORT SERVICES

Dashboard • Suite 1 • Suite 2 • Maintenance • Login • Logout



Registered Pump Implants (Mock Up)

	Patient Name	Model	Implant Date	Initial Drug
Lookup	Select	Patient 1	12-Jan-2000	History
Patient	Select	Patient 2	12-Jan-2000	History
Register	Select	Patient 3	12-Jan-2000	History
Device	Select	Patient 4	12-Jan-2000	History
Update	Select	Patient 5	12-Jan-2000	History
Registry	Select	Patient 6	12-Jan-2000	History
	Select	Patient 7	12-Jan-2000	History
	Select	Patient 8	12-Jan-2000	History
	Select	Patient 9	12-Jan-2000	History
	Select	Patient 10	12-Jan-2000	History
	Select	Patient 11	12-Jan-2000	History
	Select	Patient 12	12-Jan-2000	History

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FIG 14

Application Example 2 (B2B)



PRIORITY HEALTHCARE CORPORATION

Patient ID	Patient Phone	Patient Primary Ins	Prefrences	Consuration	Allergies	Disease	Shipping	Notes	Picture
Last Name :	First Name :		Title :		State :		Country :		Active :
Middle Name :	Address 1 :		BirthDate :		Misc. ID :		Weight :		Deceased :
Address 2 :	City :		Zip :		Patient Status :		Modified By :		Entered By :
City :	Zip :		Patient Security No. :		Social Security No. :		Entered :		Entered :
Zip :	Patient Status :		Height :		Height :		Entered :		Entered :
Patient Security No. :	Social Security No. :		Weight :		Weight :		Entered :		Entered :
Height :	Weight :		Modified By :		Modified By :		Entered :		Entered :
Last Modified On :	Last Modified On :		Entered :		Entered :		Entered :		Entered :
Date Entered :	Date Entered :		Entered :		Entered :		Entered :		Entered :
<input type="button" value="Save"/> <input type="button" value="Cancel"/>									

Fig 15

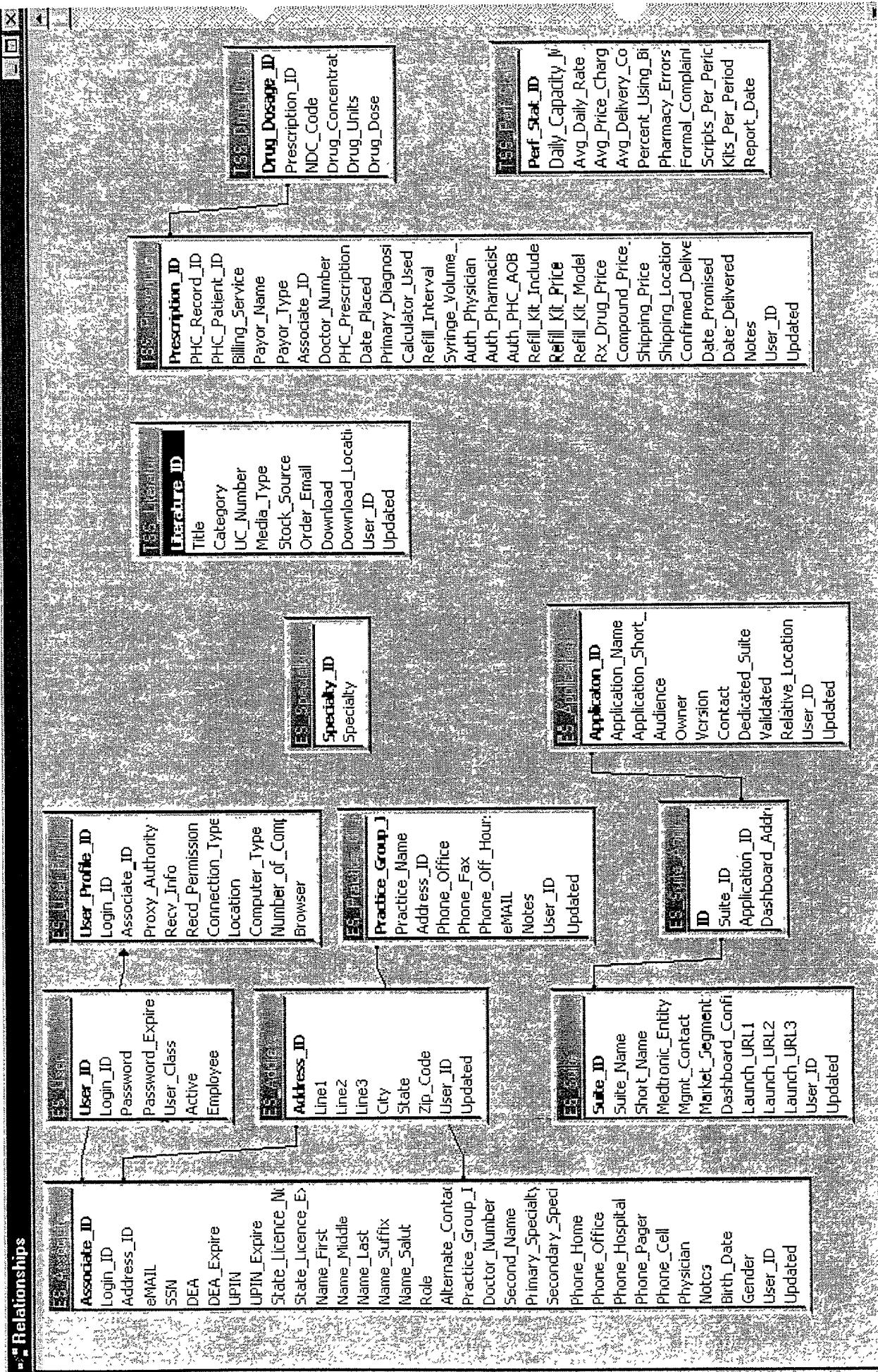


Figure 16.